

IBM WebSphere Voice Application Access, Version 5.0.

Highlights

- ***Facilitates the integration of telephony and Web development environments through a common Integrated Development Environment (IDE)/architecture using open standards like VoiceXML 2.0***
- ***Leverages the WebSphere® infrastructure to enable the management and administration of multiple channels of access on a single platform***
- ***Provides a consistent programming model to build portals and voice portlets for Independent Software Vendors (ISVs) and enterprise application developers***
- ***Creates an environment to easily implement, change and maintain dynamic contact center applications using a voice portlet approach***
- ***Leverages WebSphere Portal technology to allow users to create a personalized experience for Web or telephony self-service applications***

Next-generation pervasive computing

Today, call centers and e-businesses are moving to incorporate the next level of pervasive technology for customers and workers on the move—the voice interface. As mobile phones become more ubiquitous, the voice interface will play an increasingly important role in reducing call center costs, simplifying communications and better serving the customer.

IBM WebSphere Voice Application Access V5.0 is a speech middleware software product that extends the WebSphere portal infrastructure and programming model to voice. It provides a voice portal framework that allows e-businesses and call centers to deliver information to mobile customers using voice as the interface. Its voice recognition technology can link telephone callers to enterprise data and applications that were previously accessible only via computer screens, keyboards and personal digital assistants (PDAs).

An important advance in this latest version of WebSphere Voice Application Access is that it extends the platform even further to become a conversational application server. Users can now access WebSphere-based applications in a more natural, user-friendly way.

IBM delivers voice portal solutions for contact centers

WebSphere Voice Application Access is a voice portal platform built on WebSphere Portal and Voice eXtensible Markup Language (VoiceXML) technology. Solutions built on WebSphere Voice Application Access enable users to access a wide range of business applications and data, anywhere at any time, by using a standard telephone or cell phone and their voice.

Benefits of WebSphere Voice Application Access V5.0

Increase contact center satisfaction	<ul style="list-style-type: none">• Speech interaction reduces the time of a call by 35%+ when compared to a touchtone call customer satisfaction.• Speech recognition offers companies the potential to increase and expand automation rates resulting in improving customer satisfaction. Just a 1% increase in automation can present a tremendous return on investment in a large contact center.• Provides personalization based on customer's profile or preferences.• Provides a common, customizable, user interface across modalities.• Can serve business-to-enterprise (B2E), business-to-business (B2B) and business-to-consumer (B2C) customers using the same platform and same phone number.
Reduce contact center costs	<ul style="list-style-type: none">• Depending on your industry, agent-assisted calls cost anywhere from \$7 to \$18 per call compared to less than a dollar per call for automated speech recognition.• Providing self-service access to Web-based applications expands the contact center's voice integration, thereby reducing agent costs.• A voice portlet approach makes it easier to implement, change and maintain dynamic contact center applications, thereby reducing costs.• Agent turnover is reduced because voice-enabled self-service options cover low-value, high volume calls, allowing agents to cover more interesting high-value customer calls.• Self-service voice-enabled systems maintain a consistent response to customer calls.
Improve contact center administration	<ul style="list-style-type: none">• Provides integrated administration of users across multiple channels and modalities administration.• Allows aggregation of multiple B2C applications from a single point of entry.• A voice portlet approach makes it easier to administer, change and maintain dynamic contact center applications.
Enhance information technology (IT) systems	<ul style="list-style-type: none">• Extends existing infrastructure investments in portal and telephony systems management.• Extends the value of existing application investment from desktop to voice interface.• Extends mobile interfaces from PDA and Wireless Application Protocol (WAP) phones using Compact Hypertext Markup Language (cHTML) and Wireless Markup Language (WML) to VoiceXML.
Support ISVs and application	<ul style="list-style-type: none">• Developers can use the same business logic and connectivity to back-end data that developers used for graphical portlet development and apply this logic to voice portlet development.• Voice portlet development environment uses the same, consistent IDE framework (Eclipse-based) as Web applications.• Allows for integrated administration of groups and users across channels and modalities.• Provides for integrated secure access.• Extends existing investment in application development, Web portal infrastructure and VoiceXML application development.

WebSphere Voice Application Access leverages WebSphere Portal technology in many ways:

- *For the user, it takes advantage of the personalization features so their voice portal can be tailored to fit their needs*
- *For the administrator, it provides a consistent framework for administering users and extending the same portal security features for authentication or authorization across multiple channels*
- *For the developer, it leverages the same programming model as WebSphere Portal (Eclipse-based) to build contact center applications using VoiceXML technology. Using this IDE, developers can re-use existing code, business logic and infrastructure to enhance the development process to build VoiceXML applications.*

Improved accessibility

This end-to-end enterprise solution enhances user productivity while providing access to real-time data using one's voice. WebSphere Voice Application Access supports the administration of groups and users as well as secure access to portal-based information across multiple channels and modalities. Mobile users benefit from a more natural end-user experience. They can access a Web site, select the applications they want to use and define individual portlet preferences, such as reading urgent e-mails over the phone. A portal framework also enables contact centers

or e-business portal customers to aggregate applications and personalize them based on the profile of their end users.

Consistent programming model

WebSphere Voice Application Access extends the familiar Eclipse-based Web portal programming model and tools for voice application development. Web developers already understand the concepts of portals and portlets, so extending this model to voice is another natural evolution.

In addition, WebSphere Voice Application Access has been integrated into the Voice Toolkit for WebSphere Studio V5.0, and it allows developers to quickly and easily build, test, deploy and maintain voice portlet applications within the same, consistent IDE framework as their Web applications.

Natural Language Understanding

Natural Language Understanding (NLU) is the ability of a computer to understand and intelligently react or respond to a query or command from a human in standard language, as opposed to a specially formatted sentence or menu command. IBM can provide services to help you realize the benefits of this state-of-the-art technology in WebSphere Voice Application Access V5.0.

Open standards

IBM voice solutions provide the robust, open standards and next-generation technologies to leverage the possibilities of today with the voice requirements of tomorrow. IBM is committed to supporting open standards to foster and preserve business partner relationships while allowing for ISV customizations. WebSphere Voice Application Access V5.0 is now VoiceXML 2.0 compliant.

WebSphere infrastructure

WebSphere Voice Application Access extends existing infrastructure and application investment by building its platform on the WebSphere family of products, including WebSphere Application Server, WebSphere Portal, WebSphere Voice Server, WebSphere Voice Response Server, WebSphere Voice Response, WebSphere MQ Everyplace and WebSphere Connection Manager. Voice access to portals via telephone is available through WebSphere Voice Application Access, and mobile access to portals is available through WebSphere Everyplace Access now.

Voice application development tools

Voice Toolkit for WebSphere Studio, Version 5.0, allows application developers to easily add voice technology to existing Portlet applications. It includes a Portlet editor, debugger, VoiceXML editor, grammar editor and pronunciation builder as well as tools for testing VoiceXML applications on a PC without a telephony server. The Voice Toolkit also includes support for the local debugging of Voice Portlets to streamline development, test, and debug of Voice Portlet applications.

Complimentary products

The WebSphere Voice Application Access V5.0 package includes a number of complementary software products:

- **WebSphere Voice Server V4.2** – *provides breakthrough technology for quickly developing and deploying conversational e-business solutions.*
- **WebSphere Studio Site Developer V5.1.0** – *provides additional tools for a comprehensive voice application development suite for e-business. The license with WebSphere Voice Application Access V5.0 includes use of WebSphere Studio Site Developer V5.1.0 for development and deployment of voice applications only, not Web applications.*
- **Voice Toolkit for WebSphere Studio V5.0** – *allows application developers to easily create, debug, and deploy voice portlets.*

Custom services

IBM and certified IBM Business Partners offer a complete set of fee-based integration services that can help businesses develop and deploy their voice-enabled applications. There is a fixed-price, Fast-Start program available to help you get up and going quickly.

Custom services include requirements workshops, solution design, solution implementation, project planning, human factors, prototypes, proof of concept, integrated voice solutions, migration between platforms, voice portlet, development and education.

Partner support

Already, hundreds of IBM Business Partners with hundreds of existing solutions take advantage of online portal features, Domino forms-based applications, embedded IBM DB2® database applications, and other applications that leverage portal functionality.

Partners are developing voice portlets for WebSphere Voice Application Access and can be engaged in developing WebSphere Voice Application Access solutions. IBM is leveraging Business Partners for development of additional WebSphere Voice Application Access middleware products for ISVs, including messaging and syndicated content portlets.

IBM advances voice technology

Our worldwide resources and extensive partner network are enabling voice technology today, and down the road. IBM is enabling our customers to preserve and extend their current investment in Web technology and skills, enabling access to the very same enterprise information — through voice. With worldwide resources and an extensive Business Partner network, IBM offers a wide range of pervasive computing solutions to expand your portfolio of services to voice.

For more information

To learn more about IBM pervasive computing software solutions, call your local IBM representative or visit:

ibm.com/pervasive

Overview of WebSphere Voice Application Access V5.0 functions

Prerequisite products	<ul style="list-style-type: none">• WebSphere Voice Response AIX® V3.1 w/ VoiceXML 2.0 (ptf U489834).• WebSphere Portal V5.0.2.• WebSphere Studio Site Developer V5.1.0.
Features	<ul style="list-style-type: none">• Voice Aggregator—the run-time module that implements the voice menu needed to navigate to a specific voice portlet.• Numeric Alias Support—an add-on to the WebSphere Portal administration facility that provides an equivalent numeric-only ID and password to the portal user's alphanumeric ID and password. This is required because telephone keypads provide only numeric entry of data.• Sample applications—sample voice portlets are included in the system installation or available by download.• Reminder sample portlet: Allows users to add and retrieve reminders from the voice interface.• Hello World sample portlet: For quick installation verification.• Voice Toolkit for WebSphere Studio V5.0.
WebSphere Voice Application Access	<ul style="list-style-type: none">• WebSphere Voice Application Access V5.0 base components and sample portlets.• WebSphere Voice Server V4.2 for WebSphere Voice Response/AIX Base (one license included)—CTTS Base bundle (one license included)—Language Pack bundle (one license included)—US English, UK English, German, French.• Voice Toolkit 5.0 for WebSphere Studio with VoiceXML 2.0 support.• WebSphere Studio Site Developer V5.1.0.• WebSphere Portal Enable 5.0.2. <p><i>Note: The license agreement for WebSphere Portal allows usage ONLY for voice portal deployment. If you already have WebSphere Portal or WebSphere Voice Server installed, the WebSphere Voice Application Access V5.0 installation program will verify that you have the correct version installed and only install those software components that are not yet installed.</i></p>
V5.0 CD software includes	Operating systems supported Windows® 2000 (Advanced) Server, AIX V5.2
Languages supported	US English, UK English, German, French



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